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Donna R. Searcy, Secretary
Federal Communications Commission
Washington, DC 20554

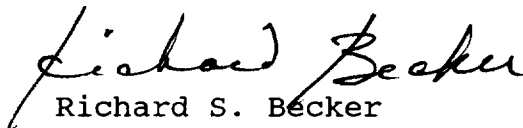
Re: PR Docket No. 92-235
In the matter of
Replacement of Part 90 by Part
88 to Revise the Private Land
Mobile Radio Services and
Modify the Policies Governing
Them

Dear Ms. Searcy:

Transmitted herewith on behalf of Cascade Telephone Communications is an original and four copies of its "Comments" filed with respect to the above-referenced proceeding.

Should any questions arise with respect to this matter, please communicate directly with this office.

Respectfully submitted,



Richard S. Becker
Attorney for Cascade Telephone
Communications

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Before the
FEDERAL COMMUNICATIONS COMMISSION
 Washington, D.C. 20554

In the matter of

**Replacement of Part 90 by Part 88 to
 Revise the Private Land Mobile Radio
 Services and Modify the Policies
 Governing Them**

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PR Docket No. 92-235

To: The Commission

COMMENTS

Cascade Telephone Communications ("CTC"), by its attorneys and pursuant to 47 C.F.R. §1.415, hereby submits these Comments in response to the Notice of Proposed Rulemaking, PR Docket No. 92-235, 57 Fed. Reg. 54034 (November 16, 1992) [hereinafter "NPRM"]¹ issued in the above-captioned proceeding.

CTC's Interest

1. CTC is a small communications company engaged in business in Southwestern Oregon. Specifically, CTC is: (1) a radio common carrier ("RCC") licensed under Part 22 of the Commission's Rules to provide common carrier communications service to the public; and (2) a supplier of communications equipment and a provider of technical services to end user licensees of Private Land Mobile Radio ("PLMR") systems, particularly in the logging industry that is so important to the economy of the Pacific Northwest. CTC has been engaged in the communications business for many years and as such, CTC has garnered extensive experience and technical expertise

¹It should be noted that the full text of the NPRM and the appendices thereto were not reproduced in the Federal Register. Accordingly, all citations to the NPRM will be referenced to the document as released on November 6, 1992, FCC 92-469.

in the operation of communications systems, including Part 90 PLMR systems, in the Southwestern Oregon area. This expertise encompasses familiarity with the communications marketplace and demand for both RCC and traditional PLMR service in rural Southwestern Oregon, as well as considerable knowledge and experience with radio propagation characteristics over the mountainous terrain in this area.

2 In light of these qualifications CTC is particularly

**There Is No Shortage Of Spectrum In
Rural Areas To Justify The Proposed Channel Splitting**

4. In the NPRM, one of the primary stated goals of the Commission was to "increase channel capacity in [the PLMR Services]...."² The Commission stated that, "[m]any PLMR channels are now unacceptably crowded"³ and the Commission proposed to increase the "number of available channels ... by 300 to 500 percent" by dramatically narrowing existing channels so that the space between channels can be reduced to 6.25 kHz (5 kHz in some frequency bands).⁴ The Commission held that, "[t]he channel split proposal is a critical element of [the NPRM]."⁵ In identifying this goal and adopting a channel splitting proposal to achieve it, the Commission recognized the extensive costs and additional burdens that will be imposed on licensees in order to meet the proposed narrowband standards.⁶

5. CTC respectfully submits, however, that the premise upon which the Commission's channel splitting proposal is based is fundamentally flawed, at least in rural areas like Southwestern

²NPRM at 1-2; see also Public Notice, "Private Radio Bureau Clarifies Key Refarming Issues," Mimeo 31969, Questions 3 and 5 (March 1, 1993) [hereinafter "Public Notice"].

³NPRM at 2; Public Notice at Question 1.

⁴NPRM at 2, 3 and Appendix A, p.13; Public Notice at Questions 5 and 6. Significantly, the Commission stated that "[a]djacent interference protection would not be provided" and that "[t]o avoid such problems, licensees should reduce the bandwidth of their receivers." NPRM at Appendix A, n.3.

⁵NPRM at Appendix A, p.14.

⁶NPRM at 1-2, Appendix A, n.2, p.13-14; Public Notice at Questions 7, 8 and 9.

Oregon. In point of fact, there is no congestion on PLMR channels in this area and many PLMR channels (including sought after VHF frequencies) continue to lie fallow. Although CTC is not knowledgeable about frequency usage across the country, CTC believes that in other rural areas that make up a vast portion of the land area of the United States, there is an ample supply of unused PLMR channels. Given this basic error in the Commission's reasoning, the extensive costs and burdens that the Commission itself has recognized will be imposed on licensees to comply with the proposed channel splitting simply cannot be justified in rural areas. In other words, the Commission has no basis for imposing its channel splitting proposals (and the substantial costs and burdens attendant thereon) on PLMR licensees in rural areas where there are already more than sufficient PLMR channels available. These additional costs and burdens will be especially damaging in rural areas where small, entrepreneurial companies like CTC can little afford the extensive equipment reconfigurations that will be required.

6. Although the Commission's proposed channel splitting may be justified in urban areas where the scarcity of PLMR spectrum alleged by the Commission does exist, the proposed channel splitting cannot be justified in rural areas where there is no such lack of spectrum. Accordingly, CTC respectfully submits that the Commission should: (1) identify those areas of the country where

the proposed NIM spectrum changes currently exist;⁷ and (2)

8. The proposed power limitation is, however, too broad in that it applies to the entire United States without any regard for the extensive terrain variations that exist throughout the country. CTC is particularly sensitive to this issue because it operates radio systems in the rugged terrain environment of Southwestern Oregon. In mountainous areas, it is very difficult to provide service from a single transmitter to all areas surrounding that transmitter due to radio propagation characteristics and shadowing effects caused by nearby terrain obstructions. This problem is particularly severe in rural areas where the population is light and sparsely distributed throughout a large geographic area. One means of combating this problem is to operate a transmitter at a relatively high elevation with a relatively high ERP. In this manner, a single base transmitter can provide better, more comprehensive service over a wider area in spite of terrain irregularities. If the proposed power limitations are imposed, however, this option will no longer be available.

9. It should also be noted that the Commission's proposed remedy to this problem is that "[s]ystems requiring greater coverage could build additional sites."¹¹ This suggestion makes little sense, however, particularly for small entities in rugged terrain areas like Southwestern Oregon, because: (1) a substantial number of additional transmitter sites would be necessary to provide adequate signal coverage; and (2) the costs of these additional sites is substantial and would prevent small licensees

¹¹NPRM at n.39.

and private entrepreneurs from installing the required additional transmitters, thereby preventing them from obtaining a wider geographic coverage area.

10. Accordingly, CTC respectfully submits that the Commission's proposed power limits should either: (1) be eliminated completely with existing power levels maintained; or (2) modified to provide for a specific mechanism whereby licensees in areas of irregular terrain can obtain relief from the proposed power restrictions. At a minimum, the Commission should modify proposed Section 88.429 to include a new subsection indicating that power limitations can be exceeded on a case-by-case basis upon request and justification by an applicant based on irregular terrain characteristics. Preferably, the Commission would adopt a specific mechanism, including relevant standards, to be followed by licensees and applicants wishing to operate at height/power levels exceeding those specified in proposed Section 88.429.¹²

Additional Considerations

11. In addition to these concerns, CTC must also point out that the proposed channel splitting will disrupt a significant cost saving measure of which many PLMR end users are currently able to

¹²In this regard, it must be emphasized that the Commission's frequency coordination requirements provide an ideal procedure for consideration of this terrain issue. Specifically, pursuant to 47 C.F.R. §90.175, frequency coordinators review applications to recommend the most appropriate frequency. Their review encompasses many factors, including "power, antenna height and gain, terrain, and other factors which may serve to mitigate potential interference." *Id.* The frequency coordinators could, therefore, play a key role in analyzing whether height/power limits can be exceeded on an individualized, case-by-case basis.

take advantage. Specifically, primarily in rural areas, mobile radio end users often obtain two-way mobile service on multiple channels with their mobile units configured to operate on each channel. In many circumstances, these end users obtain service both from an RCC operating under Part 22 of the Commission's Rules and from a separate, PLMR system licensed under Part 90 of the Commission's Rules.¹³ The mobile end user can, therefore, select the channel that it wishes to use and obtain service on the corresponding system. In this way, the mobile end user avoids the need to install two separate mobile units.

12. If the proposed channel splitting is adopted, however, this type of mobile operation will no longer function given the different technical standards that will then apply to RCC and PLMR channels. Mobile end users will no longer be able to take advantage of the significant equipment cost savings that they now enjoy. Moreover, the need to install two mobile units could result in substantial installation problems and even safety concerns when an end user must try to handle two different mobile units. These additional costs and risks must be considered by the Commission in determining whether the benefits of channel splitting justify the extensive burdens that would be imposed on PLMR licensees, PLMR end users and RCC end users who use their mobiles to obtain PLMR service.

¹³This type of mobile operation is specifically envisioned in 47 C.F.R. §22.119 and is permissible as long as the mobile is type-accepted for both uses and each system operates in full compliance with the corresponding Part 22 and Part 90 rules.

WHEREFORE, CTC respectfully submits these Comments in the above-captioned proceeding and requests that the Commission modify the proposed rule changes specified in the NPRM in accordance with these Comments.

Respectfully submitted,

CASCADE TELEPHONE COMMUNICATIONS

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